

# BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Implement the Commission's Procurement Incentive Framework and to Examine the Integration of Greenhouse Gas Emissions Standards into Procurement Policies.

Rulemaking 06-04-009 (Filed April 13, 2006)

COMMENTS OF THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC), THE UTILITY REFORM NETWORK (TURN), AND THE UNION OF CONCERNED SCIENTISTS (UCS) ON THE DRAFT "INTERIN OPINION ON PHASE 1 ISSUES: GREENHOUSE GAS EMISSIONS PERFORMANCE STANDARD"

January 2, 2007

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### 1. Introduction and Summary

The Natural Resources Defense Council (NRDC), The Utility Reform Network (TURN), and the Union of Concerned Scientists (UCS) respectfully submit these comments, pursuant to Rules 14.3, 1.9, and 1.10 of the California Public Utilities Commission's (CPUC or Commission) Rules of Practice and Procedure, on President Peevey and Administrative Law Judge (ALJ) Gottstein's draft "Interim Opinion on Phase 1 Issues: Greenhouse Gas Emissions Performance Standard" (Draft Decision or DD).

NRDC is a non-profit membership organization with a long-standing interest in minimizing the societal costs of the reliable energy services that a healthy California economy needs. In this proceeding, we focus on representing our more than 131,000 California members' interest in receiving affordable energy services and reducing the environmental impact of California's electricity consumption. TURN is a non-profit consumer advocacy organization which represents the interests of California's residential and small commercial customers. TURN has approximately 25,000 dues-paying members. UCS is a leading science-based non-profit working for a healthy environment and a safer world. Its Clean Energy Program examines the benefits and costs of the country's energy use and promotes energy solutions that are sustainable both environmentally and economically.

We strongly support the Draft Decision. We commend the Commission for the leadership role it has taken in establishing the greenhouse gas (GHG) emissions

performance standard (EPS), which was also subsequently adopted into law on a statewide basis by Senate Bill (SB) 1368, signed by Governor Schwarzenegger on September 29, 2006. We especially commend President Peevey and ALJ Gottstein for their leadership in this process, and for considering an enormous amount of information and issuing a thoughtful and thorough DD to implement the EPS in a manner that is largely consistent with SB 1368. We also appreciate the hard work of Commission staff and interested parties throughout the process leading up to this DD.

Our comments are summarized as follows, and we have also included an appendix with specific suggested changes.

- We strongly support the vast majority of Draft Decision as being fully consistent with the statutory requirements of SB 1368, and thus urge the Commission to adopt the Draft Decision with the minimal but critical modifications we suggest.
- We strongly support the Commission's finding that the EPS is analogous to an appliance efficiency standard, with a required minimum level of performance that all covered procurements must meet.
- We strongly urge the Commission to reconsider the allowance of an after-thefact attestation means of compliance with the EPS for electric service providers, community choice aggregators, and small electrical corporations.
- We urge the Commission to modify the DD's alternative compliance provisions for multi-jurisdictional utilities.
- We strongly support the DD's prohibition of a blanket RD&D exemption for facilities that use carbon capture and storage (CCS) technology, and we strongly encourage the Commission to require that any "reasonable and technically feasible plan" to employ CCS technologies will in fact result in emissions levels that will meet the EPS.
- The DD's adoption of the Federal Energy Regulatory Commission definition of "useful thermal energy" seems to be reasonable.
- We suggest the Commission correct the figures that seem to show that wind electricity has positive net emissions.
- We support the Commission's coordination with other state agencies in the design of the EPS as well as its intent to continue this coordination as the EPS is implemented throughout the state.

2. We strongly support the vast majority of Draft Decision as being fully consistent with the statutory requirements of SB 1368, and thus urge the Commission to adopt the Draft Decision with the minimal but critical modifications we suggest.

We strongly support the vast majority of the EPS design and implementation details laid out by the Draft Decision as being fully consistent with SB 1368. We support the Commission's determination that the EPS is an essential regulation needed to protect Californians from the significant financial and reliability risks associated with additional investments in highly carbon-intensive generating technologies, due to future regulations limiting GHG emissions.

We believe that nearly all of the design, implementation, and enforcement details are entirely consistent with the language and intent of SB 1368, and we commend President Peevey and ALJ Gottstein for drafting a DD that is legally sound. In particular, we strongly support the Commission's determinations that:

- Application of the EPS requires examining the characteristics and emissions of the powerplant(s) underlying a long-term contract, in all instances.
- "Covered procurements" include long-term financial commitments to LSEs'
  own retained baseload generation that extend the life of one or more units of
  that facility by five years or more.
- An EPS emissions rate of 1,000 pounds of carbon dioxide (CO2) per MWh is reasonable.
- A gateway screen approach for demonstrating compliance with the EPS is consistent with the intent of SB 1368, and is the most practicable and enforceable manner in which to determine EPS compliance.
- Exemptions for small facility, commitment, or service territory size are inconsistent with the requirements of SB 1368.
- All covered procurements must be with specified sources.
- The design of the EPS has included consideration of the effects on reliability and overall costs to customers, and any case-by-case consideration of a reliability exemption must come with a heavy burden of proof on the loadserving entity.
- The EPS as proposed by the DD is legally sound and defensible.

We strongly urge the Commission to adopt the Draft Decision in its entirety, with the minimal but critical modifications we suggest in these comments.

3. We strongly support the Commission's finding that the EPS is analogous to an appliance efficiency standard, with a required minimum level of performance that all covered procurements must meet.

We strongly support the Commission's determination that the EPS should function like an appliance efficiency standard that requires a minimum level of performance. As such, we strongly support the Commission's findings that the EPS should not include any portfolio averaging, price caps, offsets, or exemptions to meeting the standard, beyond the very limited cases as stated in the Draft Decision.

4. We strongly urge the Commission to reconsider the allowance of an after-thefact attestation means of compliance with the EPS for electric service providers, community choice aggregators, and small electrical corporations.

The DD proposes to establish an annual "after-the-fact" attestation letter for electric service providers (ESPs), community choice aggregators (CCAs), and small electrical corporations (i.e., small multi-jurisdictional utilities, or MJUs, as defined by SB 1368 §8341(d)(9), that do not have a Commission-approved alternative compliance process) to demonstrate compliance with the EPS (pages 25, 128-134). We believe that in order to be as fully consistent with the intent and primary goals of SB 1368 as possible, upfront pre-approval should be required for ESPs, CCAs, and small MJUs that do not have a Commission-approved alternative compliance process.

We maintain that upfront approval is the most administratively simple and effective means of enforcing the EPS to best serve the interests of California customers, and SB 1368 does not prohibit the Commission from establishing processes to do so. If a commitment is found after the fact to not be in compliance with the law, the damage will already have been done; it will be extremely difficult to undo that commitment. It is unclear to us that any penalty will be substantive enough to correct for the non-compliant commitment.

Upfront approval has another benefit: ensuring consistent application of the EPS across all load-serving entities (LSEs). As a centralized agency with EPS enforcement authority over all of the state's non-investor-owned utility (IOU) LSEs, the CPUC is ideally situated to serve as a central point of enforcement of the EPS and to ensure consistent application of the standard. Although the DD suggests that non-IOU LSEs can go to the CPUC for pre-approval of covered procurements, this is not enough to ensure uniform interpretation of what constitutes EPS compliance. If certain LSEs are allowed to certify their own compliance with the EPS in lieu of seeking upfront approval, each LSE could interpret the EPS for certain circumstances in a different manner. As the EPS enforcement agency designated by SB 1368 for all jurisdictional LSEs in the state, the CPUC is properly positioned to ensure consistent interpretations of the statute and should exercise its authority to consistently enforce the EPS *before* commitments are made. In addition, CPUC staff will be able to closely coordinate with CEC staff to ensure consistent application of the standard across all LSEs and publicly-owned utilities (POUs) across the state.

For these reasons, we urge the Commission to adopt an upfront approval process for all ESPs, CCAs, and small MJUs without an approved alternative compliance process. We suggest that the Commission adopt an advice letter process similar to what the DD already proposes, except that an advice letter would be required to be approved before the ESP, CCA or small MJU could enter into a new financial commitment for covered procurements. We provide specific suggested language for the relevant parts of the DD in Section I of the Appendix.

# 5. We urge the Commission to modify the DD's alternative compliance provisions for multi-jurisdictional utilities.

In Ordering Paragraph 13 (p. 222), the DD adopts PacifiCorp's three tests for alternative compliance for multi-jurisdictional utilities (MJUs):

"In addition to the other requirements of § 8341(d)(9), the application shall show compliance with subsection (B) by showing that another state regulatory commission does one of the following:

 requires the utility to review and report on the potential impacts of different carbon policies within its Integrated Resource Planning process; or

- 2) requires the utility to disclose its greenhouse gas emissions or expected change in overall emissions as a result of changes to its portfolio, including new capacity additions; or
- 3) adopts rules specifically regulating emissions of greenhouse gases from electricity generating facilities."

We do not object to the Commission providing guidance at this time as to how MJUs can show alternative compliance. However, PacifiCorp's three alternative tests are insufficient to ensure compliance with Public Utilities Code §8341(d)(9)(B), which requires that "[t]he emissions of greenhouse gases to generate electricity for the retail end-use customers of the electrical corporation are subject to a review by the utility regulatory commission of at least one other state in which the electrical corporation provides regulated retail electric service." (emphasis added)

We disagree with Finding of Fact 156 ("PacifiCorp's three alternative compliance tests closely track the statutory language and appear consistent with staff's final recommendations," p. 199). By adopting the three tests, the DD seems to imply that a showing of one of these three tests would automatically qualify an MJU for alternative compliance. However, only Test 3 includes a regulatory review of emissions. Tests 1 and 2, which refer only to requirements for utility reporting of information (but not necessarily review), do **not** in and of themselves show that the "emissions of greenhouse gases to generate electricity" for MJUs' customers "are subject to a review" by another utility regulatory commission. Although Tests 1 and 2 may be a component of another commission's review of MJU emissions that is consistent with the requirements of California P.U. Code §8341(d)(9)(B), this determination must be made for each MJU individually. The primary consideration in approving an alternative compliance process for MJUs should be that, as the staff draft workshop report stated, the "principal objectives of the EPS are met – especially, avoiding major new commitments that would tie California electric consumers to high-emission resources over the long-term." (p. 33)

In addition, we continue to encourage the Commission to allow opportunities for public comment on MJUs' proposals for alternative compliance as they are evaluated and implemented, and support the application process by which MJUs may submit proposals for alternative compliance.

In order to ensure that the MJU rules for alternative compliance are completely consistent with the requirements of SB 1368, we urge the Commission to clarify that alternative compliance must be approved by the Commission for each individual MJU, and that approval of any alternative compliance proposal is conditioned upon showing that the principle objectives of the EPS are met (namely, that California customers will still be protected from significant financial and reliability risks associated with reliance on high-GHG emitting resources). We provide specific suggested language for the relevant Findings of Fact and Ordering Paragraphs in Section II of the Appendix.

6. We strongly support the DD's prohibition of a blanket RD&D exemption for facilities that use carbon capture and storage (CCS) technology, and we strongly encourage the Commission to require that any "reasonable and technically feasible plan" to employ CCS technologies will in fact result in emissions levels that will meet the EPS.

We maintain that power generation facilities that will perform carbon dioxide capture and storage (CCS) should <u>not</u> be granted an RD&D exemption. Such projects should be required to meet the EPS on their own emissions performance merits and should not benefit from any RD&D exemption. Thus, we strongly support the Commission's determination that "any covered procurements with a baseload facility utilizing such CO2 sequestration projects will still need to meet the EPS (in contrast to a blanket RD&D exemption), but in calculating the net emissions rate we will not count the CO2 that is sequestered through injection in geological formations, as directed by SB 1368" (p. 80).

In order to strengthen this provision for facilities that employ CCS technology, we urge the Commission to adequately address the unique characteristics of this technology while ensuring that the integrity of the EPS is safeguarded and that a level playing field is provided to all facilities that employ CCS. In place of granting a blanket RD&D exemption to generating facilities employing CCS, the DD proposes:

"Because of the unique nature of such  $CO_2$  sequestration projects, we will require LSEs to file an application requesting a Commission finding of EPS-compliance for any covered procurement that employs geological formation injection. As part of this filing, the LSE shall provide documentation demonstrating that the

geological formation injection project has a reasonable and technically feasible plan that will result in a permanent sequestration of  $CO_2$  once the injection project is operational. This may mean that the sequestration project will become operational after the powerplant comes on line or the LSE enters into the contract. In implementing §§ 8341(d)(2) and (5), we clarify today that we will determine EPS compliance for such powerplants based on reasonably projected net emissions over the life of the facility. The LSE is required to make a showing of EPS compliance by presenting projections (and documenting those projections) of net emissions over the life of the powerplant. This type of showing will ensure that the purposes of SB 1368 are served." (p. 80)

We offer three brief comments on the proposed approach below, and request that the Commission strengthen its directive on considering the emissions from generating facilities employing CCS.

1) The DD does not specify what constitutes a "reasonable and technically feasible plan that will result in a permanent sequestration of CO<sub>2</sub>." Such a plan should explicitly ensure that it is enforceable, consider the economic and technical feasibility of employing CCS technology, including the geological characteristics of the proposed injection site(s), and be judged against defined criteria and standards (yet to be developed by the relevant bodies) common to all facilities and players.

We therefore ask the Commission to specify further what this CCS plan should include and to require that the CCS technology be assessed under all applicable standards that will be developed by the relevant bodies.

2) The simple presentation of "projections of…net emissions over the life of the power plant" (p. 80) will in no way be sufficient to guarantee compliance with the EPS. Complications in the capture, transport or injection processes, as well as leakages from the storage site(s), will affect the proportion of carbon dioxide that is permanently stored. CCS technology, unlike conventional generation technologies, merits special attention in this respect. These special considerations should be taken into account to ensure that the calculation of net emissions from facilities that employ CCS technologies will only net out the carbon dioxide that is truly permanently stored.

# We therefore urge the Commission to clarify how CCS compliance with the EPS will be ensured and enforced.

3) The concept of a "CCS-ready" generation facility in no way offers any kind of guarantee that CCS technology will in fact be employed in a timely fashion (if at all) so that the emissions levels of these facilities will in fact meet the EPS. Specific, guaranteed and enforceable provisions must be made for sequestration projects "that will become operational after the powerplant comes on line or the LSE enters into the contract." (p. 80)

We therefore strongly urge the Commission to specify that CCS employment is guaranteed through contract and/or permit conditions before approving such "CCS-ready" facilities as EPS-compliant.

We provide specific suggested language for the relevant parts of the DD in section III of the Appendix.

# 7. The DD's adoption of the Federal Energy Regulatory Commission definition of "useful thermal energy" seems to be reasonable.

It seems that the Federal Energy Regulatory Commission (FERC) definition of "useful thermal energy" addresses our concern that the thermal load credited for cogeneration facilities under the EPS represents thermal load that is in fact used, not simply useful. The DD provides the FERC definition as:

- "(h) Useful thermal energy output of a topping-cycle cogeneration facility means the thermal energy:
  - "(1) That is made available to an industrial or commercial process (net of any heat contained in condensate return and/or makeup water);
  - "(2) That is used in a heating application (e.g., space heating, domestic hot water heating); or
  - "(3) That is used in a space cooling application (i.e., thermal energy used by an absorption chiller)."

Parts 2 and 3 of the definition clearly address our concern, since they use the explicit definition "that is used." And assuming "that is made available" in Part 1 of the definition means the thermal energy is actually used, and not simply made available to another process but not used, we are comfortable with the FERC definition.

We urge the Commission to obtain clarification that the FERC definition of "useful thermal energy" implies in all cases that the thermal energy is in fact utilized.

# 8. We suggest the Commission correct the figures that seem to show that wind electricity has positive net emissions.

Figure 1 ("Net Emissions Comparison Data") as well as the figure on page 4 of Attachment 6 of the DD show the same graph of a comparison of various generation technologies' combined net carbon dioxide and methane emissions. Both graphs seem to indicate (at the top right) that wind electricity has positive net emissions. After examining the data presented in Attachment 6, it seems that this is simply a graphing error, and wind electricity does not have any net emissions associated with its generation. We urge the Commission to correct this graphing error.

9. We support the Commission's coordination with other state agencies in the design of the EPS as well as its intent to continue this coordination as the EPS is implemented throughout the state.

We strongly support the Commission's coordination with other state agencies – including the California Energy Commission (CEC), California Air Resources Board (CARB), and California Independent System Operator (CAISO) – in the development of the EPS rules encapsulated in the Draft Decision. As the Commission begins implementation of the EPS, we encourage the Commission to continue its coordination with these agencies to ensure as uniform a statewide standard as possible, both in the standard's design as well as its implementation and enforcement.

#### 10. Conclusion

We strongly support the Draft Decision as being consistent with SB 1368 and urge the Commission to adopt it in full, with the minimal changes discussed herein. Adopting this Draft Decision as we suggest will ensure that the EPS protects California's consumers from the financial, reliability, and environmental risks associated with additional commitments to highly carbon-intensive generating technologies and will help meet California's GHG reduction goals.

Dated: January 2, 2007

Respectfully submitted,

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Also on behalf of:

Nina Suetake, Staff Attorney, TURN Cliff Chen, Energy Analyst, UCS

#### **CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a copy of the "Comments of the Natural Resources Defense Council (NRDC), The Utility Reform Network (TURN), and the Union of Concerned Scientists (UCS) on the Draft 'Interim Opinion on Phase 1 Issues: Greenhouse Gas Emissions Performance Standard'" in the matter of R.06-04-009 to all known parties of record in this proceeding by delivering a copy via email or by mailing a copy properly addressed with first class postage prepaid.

Executed on January 2, 2007 at San Francisco, California.

Shari Walker

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#### **APPENDIX**

#### SPECIFIC PROPOSED CHANGES TO DRAFT DECISION

# I. Compliance for Energy Service Providers, Community Choice Aggregators, and small Multi-Jurisdictional Utilities

#### **Delete Findings of Fact 146-148 and 150 (pages 198-199)**

- 146. Permitting small electrical corporations, electric service providers and community choice aggregators to submit an after the fact EPS compliance showing avoids creating new pre-approval requirements and associated administrative complexity for the Commission's regulation of the procurement practices of these entities.
- —147. Permitting small electrical corporations, electric service providers and community choice aggregators to file an after the fact compliance submittal for EPS compliance is consistent with other procurement-related compliance procedures we have established for electric service providers and community choice aggregators.
- 148. The documentation and other requirements adopted in this decision provide reasonable safeguards against the risks to ratepayers of potential non-compliance by an LSE that files an after the fact compliance showing.
   150. An annual Attestation Letter, filed as an advice letter with opportunity for response/protest, is a reasonable procedural vehicle for community choice.
- for response/protest, is a reasonable procedural vehicle for community choice aggregators, electric service providers and small electrical corporations to use for documenting after the fact compliance with the interim EPS standard.

#### Finding of Fact 151 (page 199)

151. As discussed in this decision, an electric service provider, community choice aggregator or small electrical corporation should also be permitted required to file an Advice Letter requesting obtain Commission pre-approval of a new financial commitment as EPS compliant.

## Finding of Fact 161 (page 200)

161. The documentation required by this decision will provide this Commission and Commission staff with information necessary to review EPS compliance, either in pre-approval requests or in reviewing after-the-fact Attestation Letters.

# **Additional Findings of Fact to Add**

xxx. Upfront pre-approval for all LSEs is the most administratively simple and effective means of enforcing the EPS to best serve the interests of California customers, and SB 1368 does not prohibit the Commission from establishing processes to do so

xxx. Requiring upfront pre-approval for all LSEs will ensure consistent application of the EPS across the state and across all load-serving entities (LSEs).

### Ordering Paragraph 4 (pages 217-218)

- 4. All LSEs other than PG&E, SCE and SDG&E are required to submit advice letters for Commission pre-approval for all procurements subject to the Interim EPS Rules ("covered procurements"). file annual Attestation Letters, due by February 15 of each year, attesting to the Commission that the financial commitments entered into during the prior calendar year are in compliance with the EPS. The Attestation Letter shall include a certification, including the name and contract information for the LSE officer(s) certifying the following under penalty of perjury:
  - A. I have reviewed, or have caused to be reviewed, this compliance submittal
  - B. Based on my knowledge, information, or belief, this compliance
  - submittal does not contain any untrue statement of a material
  - fact or omit to state a material fact necessary to make the
  - statements true.
  - C. Based on my knowledge, information, or belief, this compliance
  - submittal contains all of the information required to be provided
  - by Commission orders, rules, and regulations.

The advice letters, as well as any responses or protests, shall be The Attestation Letter shall be filed as an advice letter and served on the service list in this proceeding, or its successor proceeding. Advice letters The Attestation Letter shall be subject to the Commission procedures governing advice letter filings, which include opportunity for protests and responses. However, no advice letter submitted for the purpose of obtaining Commission pre-approval of covered procurements Attestation Letter shall be "deemed approved" under those procedures.

Energy Division shall review the <u>advice letters</u> Attestation Letters and approve them if the <u>attestation covered procurement</u> is in compliance with the Interim EPS Rules. Energy Division approval of the Attestation Letter shall only mean that the attestation is in compliance with these rules, and does not establish any other matters, e.g., it does not determine that particular plants are in actual compliance with the EPS or that financial commitments not fully disclosed in the attestation are in compliance with this decision. These LSEs shall be subject to penalties if the attestation letters are found, at a later date, to be incomplete, misleading or incorrect.

#### Delete Ordering Paragraph 5 (pages 218-219)

5. Except as otherwise directed under Ordering Paragraphs 6, 7 and 8, LSEs other than PG&E, SCE and SDG&E may submit advice letters during the year requesting pre-approval of a new financial commitment as EPS compliant, at their discretion. These advice letter filings, as well as any responses or protests, shall be served on the service list in this proceeding or its successor proceeding. The advice letter shall be subject to the Commission procedures governing advice letter filings, which include opportunity for protests and responses. However, no advice letter submitted for this purpose shall be "deemed approved" under those procedures.

#### Ordering Paragraph 10 (pages 220-221)

10. In the compliance submittals required under Ordering Paragraphs 3 and

4 above, all LSEs shall include a listing of the new long-term financial commitments of five years or longer they plan to enter into (SCE, PG&E and SDG&E) or have entered into during the prior year (all other LSEs) with documentation to demonstrate:

- (a) That the commitments are not "covered procurements" under the Interim EPS Rules and/or
- (b) For those that represent covered procurements, documentation demonstrating that such procurements are EPS-compliant.
- (c) For any requested reliability-based exemptions that have been pre-approved by the Commission, a reference to the application and Commission decision number.

LSEs are advised to present documentation regarding the design and intended use of the powerplant(s) underlying the new long-term financial commitments utilizing the sources of documentation listed under § 8341(b)(4) of the Public Utilities Code, as well as any other sources of documentation that they believe will be relevant to the Commission's determination of whether the commitment represents a "covered procurement" under the Interim EPS Rules. As discussed in this decision, LSEs are required to include historical annual averages in their documentation of annualized plant capacity factors.

In documenting the emissions rates associated with covered procurements, LSEs shall comply with the Interim EPS Rules governing the calculation of those rates, which include the adopted method for cogeneration facilities.

# Ordering Paragraph 11 (page 221)

11. In addition to other documentation required by this decision, all LSEs shall disclose the following information:

- A. Any multiple contracts of less than five years with the same supplier, resource or facility, and
- B. Investments in retained generation, including combined-cycle gas turbine (CCGT) powerplants deemed to be in compliance under § 8341(d)(1). This information shall describe the investment amount and type of alteration by generation facility and unit

PG&E, SCE and SDG&E shall disclose the information listed above in their Quarterly Procurement Plan Compliance Reports established by D.02-10-062. All other LSEs shall disclose this information in the <u>an</u> annual Attestation Letter required under Ordering Paragraph 4 advice letter for this purpose, which shall be served on the service list in this proceeding, or its successor proceeding.

## Ordering Paragraph 12 (pages 221-222)

12. The advice letter procedures for the annual Attestation Letters and other compliance submittals described in this decision are adopted for the limited purpose of EPS compliance. In the event that some clarifications or modifications to these procedures may need to be made after the effective date of this decision in order to reconcile them with updated Commission procedures for advice letter filings in R.98-07-038 or R.06-05-027, or their successor

proceedings, the Assigned Commissioner shall provide such clarifications or modifications by ruling or other manner, in consultation with the assigned Administrative Law Judge (ALJ) and Energy Division.

# II. Multi-Jurisdictional Utility Alternative Compliance

### **Finding of Fact 156 (p. 199):**

156. PacifiCorp's three alternative compliance tests elosely track the statutory language and appear consistent with staff's final recommendations may be means in which multi-jurisdictional utilities can show compliance with § 8341(d)(9)(B).

# Ordering Paragraph 13 (p. 222):

Multi-jurisdictional electrical corporations may submit a proposal for alternative compliance with the Interim EPS Rules under § 8341(d)(9) of the Public Utilities Code by filing an application with service on the service list in this proceeding. In addition to the other requirements of § 8341(d)(9), the application shall show compliance with subsection (B). Subject to Commission approval for each utility, such compliance may be exhibited by showing that another state regulatory commission does one of the following:

- 1) requires the utility to review and report on the potential impacts of different carbon policies within its Integrated Resource Planning process; or
- 2) requires the utility to disclose its greenhouse gas emissions or expected change in overall emissions as a result of changes to its portfolio, including new capacity additions; or
- 3) adopts rules specifically regulating emissions of greenhouse gases from electricity generating facilities.

#### III. Carbon Capture and Storage

#### Footnote 22 on page 21

As we discuss in this decision, the Legislature specifically directs that we not count CO2 <u>permanently</u> injected into geological formations (so as to prevent releases into the atmosphere) in the calculation of net emissions. Therefore, although we do not adopt a blanket RD&D exemption from the EPS, we do clarify how the LSE may apply for Commission pre-approval of covered procurements utilizing such CO2 sequestration projects. In implementing §§ 8341(d)(2) and (5), we also clarify that we will determine initial EPS compliance for such covered procurements based on reasonably projected net emissions over the life of the facility, <u>that are guaranteed through contract and/or permit conditions</u>, which recognizes that the sequestration project may become operational after the powerplant comes on line or the LSE enters into the contract.

## Page 80

Because of the unique nature of such CO<sub>2</sub> sequestration projects, we will require LSEs to file an application requesting a Commission finding of EPS-compliance for any covered

procurement that employs geological formation injection. As part of this filing, the LSE shall provide documentation demonstrating that the CO<sub>2</sub> capture, transportation and geological formation injection project has an enforceable, economically reasonable and technically feasible plan that will result in the # permanent sequestration of CO<sub>2</sub>-once the injection project is operational. Standards that are developed by the relevant bodies against which these submissions will be assessed should be applied in a uniform and nondiscriminatory fashion for all such projects. Although it is acknowledged that a This may mean that the sequestration project might will become operational after the powerplant comes on line or the LSE enters into the contract, facilities will generally be expected to start permanent sequestration in full from the outset and will be allowed to delay commencing their injection operations only by a reasonable and justifiable time period that takes into account the construction and operation particulars of the injection facility, and that does not compromise the integrity of the EPS for that generating facility. In implementing §§ 8341(d)(2) and (5), we clarify today that we will determine initial EPS compliance for such powerplants based on reasonably projected net emissions over the life of the facility, that are guaranteed through contract and/or permit conditions, and will seek credible assurance during the operating life of the plant that the performance standard is met. The LSE is required to make a showing of EPS compliance by presenting projections (and documenting those projections) of net emissions over the life of the powerplant. This type of showing will ensure that the purposes of SB 1368 are served.

# Finding of Fact 44 (p. 212)

44. Because of the unique nature of CO2 geological injection sequestration projects, an LSE entering into an EPS covered procurement utilizing such projects should shall request Commission pre-approval by application. In order to ensure that the purposes of SB 1368 are served, the LSE should be required to (1) provide documentation that the project has a reasonable an enforceable, economically and technically feasible plan that will result in the a permanent sequestration of CO2 once the injection project is operational and, (2) present projections (and documentation of those projections) of net emissions over the life of the powerplant, and (3) provide documentation that the CO2 injection project complies with applicable laws and regulations.

Facilities will generally be expected to start permanent sequestration in full from the outset and will be allowed to delay commencing their injection operations only by a reasonable and justifiable time period that takes into account the construction and operation particulars of the injection facility, and that does not compromise the integrity of the EPS for that generating facility. We will determine initial EPS compliance for such powerplants based on reasonably projected net emissions over the life of the facility, that are guaranteed through contract and/or permit conditions, and will seek credible assurance during the operating life of the plant that the performance standard is met.

#### Ordering Paragraph 3 (p. 217)

(c) For covered procurements that employ geological formation injection for carbon dioxide (CO2) sequestration:

- i. PG&E, SCE and SDG&E shall request pre-approval through the non-RPS application process established by the Commission's procurement rules in R.06-02-013, or its successor proceeding, and
- ii. As part of this filing, PG&E, SCE and SDG&E shall provide documentation demonstrating that the geological formation injection project has a reasonable an enforceable, economically and technically feasible plan that will result in permanent sequestration of CO2-once the project is operational, and that the CO2 injection project complies with applicable laws and regulations. In addition, verification of adherence to this plan shall be provided once the sequestration is operational.
- iii. These applications shall be served on the service lists in R.06-02-013 and this proceeding, or their successor proceedings.

#### Ordering Paragraph 6 (p. 219)

6. For covered procurements that employ geological formation injection for CO2 sequestration, LSEs other than PG&E, SCE and SDG&E shall request Commission preapproval by filing a separate application with service on the service list in this proceeding, or its successor proceeding. As part of this filing, the LSE shall provide documentation demonstrating that the geological formation injection project has a reasonable an enforceable, economically and technically feasible plan that will result in permanent sequestration of CO2 once the injection project is operational, and that the CO2 injection project complies with applicable laws and regulations. The LSE shall also make a—an initial showing of EPS compliance by presenting projections, and documentation of those projections, of net emissions over the life of the powerplant that are guaranteed through contract and/or permit conditions. In addition, verification of adherence to the plan shall be provided once the sequestration is operational.

#### Attachment 7, page 5

B. CO<sub>2</sub> Sequestration

Carbon dioxide that is injected in geological formations, so as to prevent releases into the atmosphere, will not be counted as emissions of the powerplant in determining compliance with the EPS, provided that:

- (1) The CO2 injection project complies with applicable laws and regulations and,
- (2) The geological formation injection project has a reasonable an enforceable, economically and technically feasible plan that will result in a permanent sequestration of CO2 once the injection project is operational.

Any covered procurements with a baseload facility utilizing such CO2 sequestration projects will still need to meet the EPS, but in calculating the net emissions rate the CO2 that is <u>permanently</u> sequestered through injection in geological formations will not be counted. The <u>initial</u> calculations of net emissions will be based on reasonably projected net emissions over the life of the facility, <u>that are guaranteed through contract and/or permit conditions</u>, which recognizes that in some instances the sequestration project may become operational after the powerplant comes on line or the LSE enters into the contract.

Facilities will generally be expected to start permanent sequestration in full from the outset and will be allowed to delay commencing their injection operations only by a

reasonable and justifiable time period that takes into account the construction and operation particulars of the injection facility, and that does not compromise the integrity of the EPS for that generating facility. If CO2 injection is not operational at the time the powerplant comes on line or the LSE enters into the contract, the project must be shown to meet the EPS once the sequestration is operational.